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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,271

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Yusuke Hiraishi

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CLARK & BRODY

1090 VERMONT AVENUE, NW

SUITE 250

WASHINGTON, DC 20005

EXAMINER

JENNINGS, STEPHANIE M

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,271	Applicant(s) HIRAISHI, YUSUKE	
	Examiner Stephanie Jennings	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :24 June 2009, 09 July 2008, 08 July 2008, 02 November 2007, 23 June 2006.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Litz et al. US Patent No. 3,823,599 in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967. In regard to **claim 1**, Litz discloses a system for supplying lubricant to a pair of disk rolls (10, 13) with a spray nozzle (14) provided at the tip of the plumbing extended to a position near the disk rolls (column 2, lines 6-7). Litz does not disclose a storage tank. In regard to **claim 1**, Japanese Patent Application Publication JP 09292094 teaches an oil tank (7) with an end for discharging oil and a device (8, 9, or 30) for switching flow to the direction to the storage tank. It would have been obvious to one skilled in the art at the time of invention

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to provide Litz's device with a storage tank of JP 09292094 because this allows for extra lubricant to be stored during operation. Litz in view of JP 09292094 does not disclose a device for switching flow direction or a device for releasing pressure in the plumbing. In regard to **claim 1**, Japanese Patent Application Publication JP 10-028902 teaches a device for adjusting the flow of the lubricant. It would have been obvious to one skilled in the art at the time of invention to provide Litz in view of JP 09292094 with the adjusting device because this provides for more efficient lubrication. Litz in view of JP 10-028902 and JP 09292094 does not disclose a device for releasing pressure in the plumbing. In regard to **claim 1**, Japanese Patent Application Publication JP 11035967 A teaches a guide shoe that releases and controls the pressure. It would have been obvious to one skilled in the art at the time of invention to provide the device of Litz in view of JP 10-028902 and JP 09292094 with the pressure controlling apparatus of JP 11035967 A because this prevents a pressure buildup.

4. In regard to **claim 2**, JP 09292094 teaches a disk like rotary member that can be pushed at a variable to rate so that oil lubricant is expelled from the outlet.

5. In regard to **claims 3 and 12**, JP 10-028902 teaches a spray nozzle that can be flexibly configured. The spray nozzles of JP 10-028902 are capable of being moved if the disc rolls move.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A as applied to claim 1 above, and further in view of Jain US Patent No. 6,330,818.

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7. Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A does not disclose a device for cleaning the lubricant piping.

8. In regard to **claim 4**, Jain teaches cleaning of the lubricant piping (column 5, lines 26-30).

9. It would have been obvious to one skilled in the art to provide the device of Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A with the cleaning system of Jain because cleaning the lubricant piping system regularly prevents clogging of the nozzle.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A as applied to claim 1 above, and further in view of JP 05214358.

11. Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A does not disclose a device for supplying a solidifier of solidifying the lubricant.

12. In regard to **claim 5**, JP 05214358 teaches blending to obtain 100 parts by weight with one or more solid lubricants with 0-500 parts by weight water dispersion type polymer and 60-350 parts by weight water dissolution type polymer to obtain a lubricant composition. It would have been obvious to one skilled in the art to provide a method of solidification to the lubricant, because a solidified lubricant would be easier to apply to the rolls.

13. Claims 6-8, 10-11, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yorifuji et al. 5,983,689 in view of Japanese Patent Application

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Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967.

14. In regard to **claim 6**, Yorifuji discloses a piercing mill with a plug (3), and a pair of disc rolls (2, 2') (column 4, lines 27-35).

15. Yorifuji in view of JP 09292094 does not disclose a device for switching flow direction or a device for releasing pressure in the plumbing or a storage tank. In regard to **claim 6**, Japanese Patent Application Publication JP 09292094 teaches an oil tank (7) with an end for discharging oil and a device (8, 9, or 30) for switching flow to the direction to the storage tank. It would have been obvious to one skilled in the art at the time of invention to provide Yorifuji's device with a storage tank of JP 09292094 because this allows for extra lubricant to be stored during operation.

16. Yorifuji in view of JP 09292094 does not disclose a device for switching flow direction or a device for releasing pressure in the plumbing. In regard to **claim 6**, Japanese Patent Application Publication JP 10-028902 teaches a device for adjusting the flow of the lubricant. It would have been obvious to one skilled in the art at the time of invention to provide Yorifuji in view of JP 09292094 with the adjusting device because this provides for more efficient lubrication. Yorifuji in view of JP 10-028902 and JP 09292094 does not disclose a device for releasing pressure in the plumbing. In regard to **claim 6**, Japanese Patent Application Publication JP 11035967 A teaches a guide shoe that releases and controls the pressure. It would have been obvious to one skilled in the art at the time of invention to provide the device of Yorifuji in view of JP 10-

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028902 and JP 09292094 with the pressure controlling apparatus of JP 11035967 A because this prevents a pressure buildup.

17. In regard to **claim 7**, JP 10-028902 teaches a spray nozzle with a multiaxial arm (60).

18. In regard to **claims 8 and 10**, Yorifuji discloses a method of manufacturing seamless pipes or tubes by using a piercing mill having a pair of disc rolls while supplying a lubricant to the disc rolls, comprising: supplying the lubricant to the disc rolls during piercing; circulating the lubricant in a plumbing when piercing is not performed; and releasing pressure of the lubricant in the plumbing near a spraying port to the disc rolls and spraying the lubricant from the inlet side of the piercing mill (page 2, lines 63-70).

19. In regard to **claims 11 and 14**, Yorifuji discloses a method for manufacturing a seamless pipe part (column 1, lines 8-14).

20. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yorifuji in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967 as applied to claim 8 above, and further in view of Ginzburg US Patent No. 5,460,023.

21. Yorifuji in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application

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Publication JP 11035967 does not disclose orienting the nozzles at angles of five degrees from a center plane parallel to the disc rolls.

22. In further regard to **claim 9**, Ginzburg teaches determination of an optimum spray angle from 3° to 10° (abstract and column 2, lines 12-21).

23. It would have been obvious to one of ordinary skill in the art to provide the device of Yorifuji in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967 with the spray nozzle angular configuration ability of Ginzburg because this allows for comprehensive lubrication application to the disc rolls.

24. In regard to **claim 13**, Yorifuji teaches a method for manufacturing a seamless pipe part (column 1, lines 8-14).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie Jennings whose telephone number is (571) 270-7392. The examiner can normally be reached on Monday-Thursday, 7 am - 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J./
Examiner, Art Unit 3725
December 17, 2009

/Edward Tolan/
Primary Examiner, Art Unit 3725